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--23. The structure of claim 21 wherein said first capacitor electrode, said first barrier layer, said copper seed layer, said dielectric, said second barrier layer, and said second capacitor electrode are fabricated in a single ionized metal plasma tool.--

1. The average cost of a new car is \$20,000. The cost of a new car is a random variable with a normal distribution. The standard deviation of the cost of a new car is \$2,000. The probability that the cost of a new car is between \$18,000 and \$22,000 is 0.9544. The probability that the cost of a new car is less than \$18,000 is 0.0228. The probability that the cost of a new car is more than \$22,000 is 0.0228.

--26. The structure of claim 21 wherein said first barrier layer comprises metallic tantalum nitride having a nitrogen content of approximately 21%.--

--28. The structure of claim 21 wherein said dielectric comprises tantalum nitride having a nitrogen content of at least 30%.--

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--29. The structure of claim 21 wherein said dielectric comprises tantalum nitride having a nitrogen content of approximately 60%.--

--30. The structure of claim 21 wherein said dielectric comprises ceramic tantalum nitride.--

--31. The structure of claim 22 wherein a percentage of nitrogen partial flow in a mixture of gases in said ionized plasma tool is adjusted so as to cause a nitrogen content in each of said first and second barrier layers to be approximately 21%.--

--32. The structure of claim 22 wherein a percentage of nitrogen partial flow in a mixture of gases in said ionized plasma tool is adjusted so as to cause a nitrogen content in said dielectric to be to be at least 30%.--

--33. The structure of claim 22 wherein a percentage of nitrogen partial flow in a mixture of gases in said ionized plasma tool is adjusted so as to cause a nitrogen content in said dielectric to be approximately 60%.--

--34. A capacitor comprising:

a first capacitor electrode comprising a bottom interconnect metal segment;

a first barrier layer over said bottom interconnect metal segment;

a seed layer over said first barrier layer;

a dielectric over said seed layer;

a second barrier layer over said dielectric;

a second capacitor electrode comprising a top interconnect metal segment, wherein said bottom interconnect metal segment, said first barrier layer, said seed layer, said dielectric, said second barrier layer, and said top interconnect metal segment are fabricated in a single tool.--

--35. The structure of claim 34 wherein said single tool is a single ionized metal plasma tool.--

--36. The structure of claim 34 wherein said bottom interconnect metal segment comprises copper.--

--37. The structure of claim 34 wherein said top interconnect metal segment comprises copper.--

--38. The structure of claim 34 wherein said first barrier layer comprises metallic tantalum nitride.--

--39. The structure of claim 34 wherein said second barrier layer comprises metallic tantalum nitride.--

--41. The structure of claim 34 wherein said second barrier layer comprises metallic tantalum nitride having a nitrogen content of approximately 21%.--

--43. The structure of claim 34 wherein said dielectric comprises tantalum nitride having a nitrogen content of approximately 60%.--

--44. The structure of claim 34 wherein said dielectric comprises ceramic tantalum nitride.--

--45. The structure of claim 35 wherein a percentage of nitrogen partial flow in a mixture of gases in said ionized plasma tool is adjusted so as to cause a nitrogen content in each of said first and second barrier layers to be approximately 21%.--

--46. The structure of claim 35 wherein a percentage of nitrogen partial flow in a mixture of gases in said ionized plasma tool is adjusted so as to cause a nitrogen content in said dielectric to be at least 30%.--

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--47. The structure of claim 35 wherein a percentage of nitrogen partial flow in a mixture of gases in said ionized plasma tool is adjusted so as to cause a nitrogen content in said dielectric to be approximately 60%.--

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